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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/822,092  
Filing Date: April 09, 2004  
Appellant(s): BRUNET ET AL.

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Philip S. Lyren  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed on 02/17/2009 appealing from the Office action mailed on 09/23/2008.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

US 2001/0053688	RIGNELL et al.	12-2001
US 6,549,770	MARRAN	4-2003
WO 98/38823	LAWRENCE	9-1998
US 2002/0116665	PICKOVER et al.	8-2002
US 2002/0198976	DAVENPORT	12-2002
6,895,387	ROBERTS et al.	5-2005
US 2003/0005108	BARTLEY et al.	1-2003
US 2004/0215830	SHENFIELD	10-2004
US 2003/0195753	HOMUTH	10-2003
US 2002/0178241	ERIKSSON	11-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-8, 10-20, 22, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. (US 2001/0053688 A1) in views of MARRAN (US 6,549,770 B1), LAWRENCE (WO 98/38823), PICKOVER et al. (US 2002/0116665 A1), and DAVENPORT

(US 2002/0198976 A1).

**Regarding claim 1**, Rignell discloses a method of providing customer care within a mobile care framework (p.0084), comprising:

capturing device profile data over-the-air from a device agent (paragraphs [0102]-[0104]) within a mobile device (paragraphs [0024]-[0028], [0038]-[0049], [0077]-[0078], and [0080]; a support request message is generated by a mobile unit containing device profile data (e.g. unit settings/parameters, soft-, hard- and firmware modules, unit identification, etc.), and is transmitted over the air to a remote support location where the message is monitored and/or displayed to at least one service/support person), the device profile data comprising user-specific and device-specific data (paragraphs [0038]-[0049]; the profile data contained in the support message comprises information regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047]));

correlating the device profile data to a database of known mobile device issues and associated solutions to the mobile device issues to identify a solution for the mobile device (paragraphs [0080]-[0082], [0091], and [0106]; the support location access one or more databases on the basis of the information received from the mobile device to generate a solution enabling the solving of the problems of the mobile unit; it is inherent to recognize that a correlating step is implicit because a solution for the problems is generated according to information included in the support request); and

forwarding to the mobile device over-the-air the solution identified for execution by the device agent (paragraphs [0081]-[0085], and [0093]; support information solving the problem(s) of the mobile unit is generated and provided to the mobile unit), wherein the device agent is programmed to capture the device profile data (paragraph [0077]-[0078], and [0102]-[0103]; the mobile unit has means, i.e., microprocessor/device agent, which generates a support message containing the profile data, it is inherent that the microprocessor is programmed to capture the profile data of the mobile unit that is included in the support request message) and execute the solution on the mobile device (paragraphs [0031], [0081]-[0085], and [0093]; the mobile unit automatically updates its settings and parameters with the solution received from the remote support location; it is implied that a component in the device such as the microprocessor implements these new settings).

But, Rignell does not particularly disclose wherein a programmed analytics engine is used for identifying the solutions for the mobile device issues.

However, in the same field of endeavor, Marran teaches a programmed analytics engine capable of identifying solutions for mobile device issues (Abstract; col. 4, line 16 – col. 5, lines 1-11; col. 7, lines 37-45; col. 8, line 29 – col. 9, lines 1-15; Marran teaches a system comprising an intelligent/expert system (i.e., analytics engine) with which digital devices (i.e., mobile devices) communicates, and is configured to processes complex inputs, discovers problems from the complex inputs, and formulates individualized solutions for discovered problems; also, the intelligent system searches the wireless digital communications network for, and retrieves, the necessary data for solving the discovered problems and directly downloads (automatically) the necessary data to the subscriber's mobile digital device over-the-air). Therefore, it would have

been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to include (at the support location) an analytics engine programmed to identify solutions for the mobile device issues, as suggested by Marran, since such a modification would automate the procedure of maintaining digital telephones up to date given that the analytics engine (i.e., expert system) automatically pushes downloads to subscriber's digital telephone when needed, keep pace with current changes and constantly search for recognized events and decides what particular mobile devices require provisioning, repairs, etc. (col. 4, lines 15-19; col. 5, lines 31-45; col. 8, lines 29-35, 52-56), as a result mobile digital devices are more efficiently managed.

But, the combination of Rignell and Marran does not expressly disclose the step of matching the device profile data to a customer profile, the customer profile including a profile history.

However, Lawrence teaches a system for diagnosing a problem related to the use of a wireless communication device that matches device profile data to a customer profile, the customer profile including a profile history (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information) and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination of Rignell and Marran to include the step of matching the device profile data to a customer profile, the customer profile including a profile history, as suggested by Lawrence, since such a modification would provide the best appropriate solution that leads to the resolution of the device problems.

Furthermore, Rignell discloses wherein the database includes updates or patches that match problem criteria of the mobile device issues (paragraphs [0081]-[0084]; the remote support location accesses a database and generates support information for the mobile device that may include patches or updated versions of current software).

But, the combination of Rignell, Marran, and Lawrence does not particularly disclose the step of receiving from software application developers, the updates and patches that match the problem criteria of the mobile device issues.

However, Pickover teaches a system wherein a database receives from software application developers, updates and patches that match the problem criteria of mobile device issues (paragraphs [0026]-[0027], [0032]-[0033], [0047], [0050]-[0059]; Pickover teaches a system in which a user device (i.e., mobile device) forwards to a controller (i.e., service provider) information about detected errors in a software, and the controller uses the information to identify a patch for the error, the controller stores the patches received from one or more software manufacturers (i.e., developers) and vendors, and the vendor and manufacturers share information with the controller to ensure that the controller has up to date information regarding all the patches and fixes for the software errors). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the step of receiving from software application developers, the updates and patches that match the problem criteria of the mobile device issues, as suggested by Pickover, since such a modification would provide the advantage that the database will have the most up to date information regarding patches and fixes made available by software developers (i.e., manufacturers).



In addition, the combination does not particularly disclose further comprising, allowing hardware vendors and the software application developers to query the database and obtain statistics on a number of mobile devices with a particular installed software.

However, Davenport teaches a system that allows vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software (paragraph [0014]; the invention enables manufacturers (i.e., software developers/vendors) to gain access to statistics about the usage of an application across the application's entire user population). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of allowing vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software, as suggested by Davenport, since such a modification would allow the vendors and software developers to respond to actual customer usage and improve products to better facilitate usage of the software.

**Regarding claim 2**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Pickover discloses further comprising, allowing hardware vendors and the software application developers to access the database and provide fixes for bugs in software for the mobile device (paragraphs [0026]-[0027] and [0047]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include further comprising, allowing hardware vendors and the software application developers to access the database and provide fixes for bugs in software for the mobile device, as suggested by Pickover, since such a modification would provide the advantage that the database will have the most up to date information

regarding patches and fixes made available by the software developers and vendors.

**Regarding claim 4**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Rignell discloses wherein the capturing step comprises reading device profile data selected from the group consisting of configuration settings, resident applications, and diagnostic data (paragraphs [0038]-[0049], and [0077]).

**Regarding claim 5**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 4, in addition Rignell discloses wherein the diagnostic data comprises diagnostic data selected from the group consisting of make and model of the device, total and available memory, total and available storage, battery life, connection strength, connection settings, user requests, usage statistics, soft reset count, recently used applications, memory heap (paragraph [0077]; e.g., make and model number, status of the mobile unit, etc.).

**Regarding claim 8**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Rignell discloses wherein the correlating step comprises automatically selecting one or more solutions from among available application or firmware updates, configuration settings, problem resolutions, and user interface configurations (paragraphs [0081]-[0084]; the support information solving the problems of the mobile unit is generated on the basis of the information received from the mobile unit, and include the correct settings, updated versions of current and/or firmware modules, patches, etc., that would solve the mobile unit's problem).

**Regarding claim 10**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Rignell discloses wherein the method is

performed at the request of a user of the mobile device (paragraphs [0024]-[0025], and [0029] - lines 1-4).

**Regarding claim 11**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Rignell discloses wherein the method is performed as a scheduled event automatically by the device agent (paragraphs [0024], [0027]-[0029], [0074]-[0076]; a support request from the mobile unit may be generated at any internal event like a timer event or status check performed at regular intervals).

**Regarding claim 12**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, in addition Rignell discloses wherein the method is performed at the request of a customer care center (paragraphs [0024], [0026], [0029]-lines 1-4; i.e., on request of the support location (i.e., customer care center)).

**Regarding claim 13**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 12, in addition Rignell discloses wherein there are a plurality of mobile devices, and the customer care center performs the method for more than one mobile device substantially at the same time (paragraphs [0024], [0026], and [0030]; the support location/entity may send a message to several mobile units at the same time requesting information from the mobile units to provide the mobile units with solutions to technical problems they may have).

**Regarding claim 14**, Rignell discloses a mobile care framework comprising:

a customer care application (Fig. 2; i.e., remote support location/ facility 402);

a data store accessible by the customer care application (Fig. 4; paragraph [106]; i.e.,

database 407);

customer care application/(support location) means for communication between the customer care application and the data store (Fig. 4; paragraphs [0106], [0108]; i.e., means 406 is one or more specialized or general-purpose microprocessors coupled to database 407);

a device agent in a mobile device that captures device profile data and responds to commands received over-the-air from the customer care application (Fig. 4; paragraphs [0102]-[0107]; the mobile unit comprises a microprocessor (i.e. device agent) to generate support request messages (including device profile data) to communicate or interact with a remote support location/facility (i.e., customer care application), and obtain solutions from the remote location to the mobile unit problems);

wherein the customer care application is programmed; (a) to receive the device profile data from the mobile device, use the customer care application/(support location) means to correlate the device profile data with a database of known issues and associated solutions in the data store, and forward a solution to the device agent for execution on the mobile device (paragraphs [0077]-[0085], [0101]-[0109]; the remote support location/facility receives the profile data (i.e., support message) from the mobile unit over the air, in where the message is monitored by a program that generates a solution (or support information) on the basis of the information received from the mobile unit and accessing one or more databases, subsequently the support information (i.e., solutions) generated is transmitted to the mobile unit to correct the problems; see also remarks about claim 1 above),

wherein the device profile data comprises user-specific and device-specific data

(paragraphs [0038]-[0049]; the profile data contained in the support message comprises information regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047])),

and wherein the customer care application/(support location) means is programmed identify solutions given the user-specific and device-specific data in the device profile data (p.0081-0082; p.0106; means 406 from the remote support location generates support information for the solving of the mobile unit problems (i.e., solutions) on the basis of the information comprised in the support request message received from the mobile unit).

But, Rignell does not particularly disclose wherein the support location means is an analytics engine used for identifying the solutions for the mobile device issues.

However, in the same field of endeavor, Marran teaches a system comprising an analytics engine for identifying solutions for mobile device issues (Abstract; col. 4, line 16 – col. 5, lines 1-11; col. 7, lines 37-45; col. 8, line 29 – col. 9, lines 1-15; Marran teaches a system comprising an intelligent/expert system (i.e., analytics engine) with which digital devices (i.e., mobile devices) communicates, and is configured to processes complex inputs, discovers problems from the complex inputs, and formulates individualized solutions for discovered problems; also, the intelligent system searches the wireless digital communications network for, and retrieves, the necessary data for solving the discovered problems and directly downloads (automatically) the necessary data to the subscriber's mobile digital device over-the-air). Therefore, it would have

been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to introduce (at the support location) an analytics engine programmed to identify solutions for the mobile device issues, as suggested by Marran, since such a modification would automate the procedure of maintaining digital telephones up to date given that the analytics engine (i.e., expert system) automatically pushes downloads to subscriber's digital telephone when needed, keep pace with current changes and constantly search for recognized events and decides what particular mobile devices require provisioning, repairs, etc. (col. 4, lines 15-19; col. 5, lines 31-45; col. 8, lines 29-35, 52-56), as a result mobile digital devices are more efficiently managed.

But, the combination of Rignell and Marran does not particularly disclose wherein the customer care application matches the device profile data to a customer profile, the customer profile including a profile history.

However, Lawrence teaches a customer service system for diagnosing a problem related to the use of a wireless communication device that matches device profile data to a customer profile, the customer profile including a profile history (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information) and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination of Rignell and Marran to include the features of wherein the customer care application matches the device profile data to a customer profile, the customer profile including a profile history, as suggested by Lawrence, since such a modification would provide the best

appropriate solution that leads to the resolution of the device problems.

Furthermore, Rignell discloses wherein the database includes updates or patches that match problem criteria of the mobile device issues (paragraphs [0081]-[0084]; the remote support location accesses a database and generates support information for the mobile device that may include patches or updated versions of current software).

Furthermore, Rignell discloses wherein the database includes updates or patches for fixing software problems in mobile devices (paragraphs [0081]-[0084]; the remote support location accesses a database and generates support information for the mobile device that may include patches or updated versions of current software).

But, the combination of Rignell, Marran, and Lawrence does not particularly disclose wherein hardware vendors and software application developers provide the updates and patches to the database.

However, Pickover teaches a system wherein a database receives from software application developers and vendors, updates and patches to fix software problems for mobile devices (paragraphs [0026]-[0027], [0032]-[0033], [0047], [0050]-[0059]; Pickover teaches a system in which a user device (i.e., mobile device) forwards to a controller (i.e., service provider) information about detected errors in a software, and the controller uses the information to identify a patch for the error, the controller stores the patches received from one or more software manufacturers (i.e., developers) and vendors, and the vendor and manufacturers share information with the controller to ensure that the controller has up to date information regarding all the patches and fixes for the software errors). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to

include wherein hardware vendors and software application developers provide the updates and patches to the database, as suggested by Pickover, since such a modification would provide the advantage that the database will have the most up to date information regarding patches and fixes made available by software developers (i.e., manufacturers) and vendors.

In addition, the combination does not particularly wherein the hardware vendors and software application developers query the database to obtain statistics on a number of mobile devices having a particular installed software.

However, Davenport teaches a system that allows vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software (paragraph [0014]; the invention enables manufacturers (i.e., software developers/vendors) to gain access to statistics about the usage of an application across the application's entire user population). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of allowing vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software, as suggested by Davenport, since such a modification would allow the vendors and software developers to respond to actual customer usage and improve products to better facilitate usage of the software.

**Regarding claim 16**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device profile data comprises diagnostic data selected from the group consisting of make and model of the device, total and available memory, total and available storage, battery life, connection strength, connection settings, user requests, usage statistics, soft reset count, recently



used applications, memory heap (paragraph [0077]; e.g., make and model number, status of the mobile unit, etc.).

**Regarding claim 19**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the analytics engine is programmed to select at least one solution from among available application or firmware updates, configuration settings, problem resolutions, user interface configurations (paragraphs [0081]-[0084]; the support information solving the problems of the mobile unit is generated on the basis of the information received from the mobile unit, and include the correct settings, updated versions of current and/or firmware modules, patches, etc., that would solve the mobile unit's problem).

**Regarding claim 20**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device agent comprises an embedded application (Fig. 4; paragraphs [0102]-[0103]; is inherent to recognize that the microprocessor, i.e. device agent, have an embedded application in order to execute the process of transmitting profile data and updating the mobile unit with solutions).

**Regarding claim 22**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the customer care application comprises a customer service representative interface (paragraphs [0080], [0082], and [0094]; the remote location support/facility have a support team or person that the mobile unit user can contact for direct support).

**Regarding claim 23**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care frame work of claim 14, in addition Marran discloses wherein the analytics engine comprises a rule-based application (col. 8, lines 62-67; col. 9, lines 8-17). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, for the analytics engine to comprise a rule-based application, as taught by Marran, since it provides human expertise to a computer system.

3. **Claims 6 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, PICKOVER et al., DAVENPORT, and ROBERTS et al. (US 6,895,387 B1).

**Regarding claim 6**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, but the combination does not particularly disclose further comprising, allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a subscriber of the mobile device.

However, Roberts teaches a system that allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a subscriber of the mobile device (col. 3, lines 39-45; col. 6, lines 37-60). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combination to include allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a

subscriber of the mobile device, as suggested by Roberts, in order to prevent unauthorized third parties to obtain user information.

**Regarding claim 18**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, but the combination does not particularly disclose wherein the hardware vendors and the software application developers query the database and search the device profile data while preserving privacy of a subscriber of the mobile device.

However, Roberts teaches a system that allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a subscriber of the mobile device (col. 3, lines 39-45; col. 6, lines 37-60). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify the combination to include allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a subscriber of the mobile device, as suggested by Roberts, in order to prevent unauthorized third parties to obtain user information.

4. **Claims 7 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, PICKOVER et al., DAVENPORT, and BARTLEY et al. (US 2003/0005108 A1).

**Regarding claim 7**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, but the combination does not particularly disclose further comprising allowing hardware vendors and the software application developers to access

the database and obtain reports on stability of an application in the mobile device.

However, Bartley discloses a system wherein vendors and software application developers to obtain reports on stability of an application in the mobile device (paragraphs [0020]-[0021]; vendors have access to performance data (i.e., stability of application) of costumer's devices to evaluate the data for business purposes). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include allowing hardware vendors and the software application developers to access the database and obtain reports on stability of an application in the mobile device, as suggested by Bartley, since such a modification would allow vendors and software developers to analyze the stability information for business purposes, such as determining whether users need additional products.

**Regarding claim 17**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, but the combination does not particularly disclose wherein hardware vendors and the software application developers access the database and obtain reports on stability of an application in the mobile device.

However, Bartley discloses a system wherein vendors and software application developers to obtain reports on stability of an application in the mobile device (paragraphs [0020]-[0021]; vendors have access to performance data (i.e., stability of application) of costumer's devices to evaluate the data for business purposes). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include wherein hardware vendors and the software application developers access the database and obtain reports on stability of an application in the mobile device, as

suggested by Bartley, since such a modification would allow vendors and software developers to analyze the stability information for business purposes such as determining if users need additional products.

5. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, PICKOVER et al., DAVENPORT and HOMUTH (US 2003/0195753 A1).

**Regarding claim 9**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method of claim 1, but the combination does not particularly disclose wherein the wherein the correlating step further comprises escalating the problem to a second level customer service support bureau.

However, Homuth teaches systems and methods for priority-based customer service wherein customer may be provided with a first and second level of customer service, a second level having a higher priority of service than the first (abstract; p.0025). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to modify the combination to include the features of escalating the problem to a second level customer service support bureau, as suggested by Homuth, since a second level customer service provides more expertise and a higher quality of service for solving customer issues.

6. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, PICKOVER et al., DAVENPORT, and ERIKSSON (US 2002/0178241 A1).

**Regarding claim 21**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the mobile care framework of claim 14, but the combination does not particularly disclose wherein the data store is linked to vendor and community support.

However, Eriksson teaches a management system that includes a server to store information about devices and its configurations, that when a device attempts to initiate an unknown function the server interrogates the device about settings or configuration information and if determines that the function is unknown, the sever contacts an Internet server of the manufacturer of the device (i.e. vendor) for requesting the pertinent information about the unknown function (abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to modify the combination to include the features of linking the data store to a vendor and community support, as suggested by Eriksson, because such a modification would provide access to off-site engines or databases to obtain all the information necessary to fully assist the mobile device.

7. **Claims 27 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, PICKOVER et al., DAVENPORT, and SHENFIELD (US 2004/0215830 A1).

**Regarding claims 27-28**, the combination of Rignell, Marran, Lawrence, Pickover, and Davenport disclose the method and framework of claims 1 and 14, but the combination does not expressly disclose wherein the device profile data comprises XML data and the solution forwarded comprises XML data.

However, exchanging data using eXtensible Markup Language (XML) is well known in

the art and Shenfield is evidence of the fact. Shenfield teaches that eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems and can be used on over-the-air applications (paragraphs [0004], [0006], and [0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of wherein the device profile data comprises XML data and the solution forwarded comprises XML data, as suggested by Shenfield, because eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems.

8. **Claims 24-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of LAWRENCE, PICKOVER et al, and DAVENPORT.

**Regarding claim 24**, Rignell discloses a mobile phone, comprising:

a device agent that communicates over-the-air with a customer care application within a mobile care framework to provide device profile data (paragraphs [0077]-[0078], and [0102]-[0103]; the mobile unit has means for generating a support request message containing device profile data [e.g., unit settings/parameters, soft-, hard- and firmware modules, unit identification, etc.]), comprising user-specific and device-specific data (paragraphs [0038]-[0049]; the profile data contained in the support message comprises information regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047])); and

the device agent programmed to receive and execute a solution selectively over-the-air from the customer care application (paragraphs [0080]-[0081], and [0084]-[0085]; the mobile unit receives an SMS with support information from the support location and is programmed to automatically update with some of the correct settings, updates, patches, etc. received from the support location), and further being programmed to capture the device profile data from the mobile device (paragraph [0077]-[0078], and [0102]-[0103]; the mobile unit has means, i.e., microprocessor/device agent, which inherently captures the profile data to include it in the support request message), and execute the solution on the mobile device (paragraphs [0031], [0081]-[0085], and [0093]; the mobile unit automatically updates its settings and parameters with the solution received from the remote support location; it is implied that a component in the device such as the microprocessor implements these new settings), the solution based on the user-specific and device-specific profile data (paragraphs [0081]-[0082], and [0106]; the remote support location generates support information for the solving of the mobile unit problems (i.e., solutions) on the basis of the information comprised in the support request message received from the mobile unit, the support request message comprises user-specific and device-specific data).

But, Rignell does not particularly disclose wherein the customer care application is enabled to match the device profile data to a customer profile.

However, Lawrence teaches a customer service system for diagnosing a problem for a mobile device that match the device profile to a customer profile (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information)



and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to include the features of wherein the customer care application is enabled to match the device profile data to a customer profile, as suggested by Lawrence, since such a modification would provide the best appropriate solution that leads to the resolution of the device problems.

But, the combination of Rignell and Lawrence does not particularly disclose wherein the profile data is accessible by software application developers and hardware vendor to provide fixes for bugs in software in the mobile device.

However, Pickover teaches a system in which software developers and vendors have access to profile data of devices and provide fixes for bugs in software in the devices (paragraphs [0026]-[0027], [0032]-[0033], [0047], [0050]-[0059]; Pickover teaches a system in which a user device (i.e., mobile device) forwards to a controller (i.e., service provider) information about detected errors in a software, and the controller uses the information to identify a patch for the error, the controller stores the patches received from one or more software manufacturers (i.e., developers) and vendors, and the vendor and manufacturers share information with the controller to ensure that the controller has up to date information regarding all the patches and fixes for the software errors). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include wherein software developers and vendors have access to profile data of devices and provide fixes for bugs in software in the devices, as suggested by Pickover, since such a modification would provide the advantage that the devices will have the most up to date information regarding patches and fixes

made available by software developers (i.e., manufacturers) and vendors.

In addition, the combination does not particularly wherein the hardware vendors and software application developers query the database to obtain statistics on a number of mobile devices having a particular installed software.

However, Davenport teaches a system that allows vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software (paragraph [0014]; the invention enables manufacturers (i.e., software developers/vendors) to gain access to statistics about the usage of an application across the application's entire user population). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of allowing vendors and software developers to obtain statistics on a number of mobile devices with a particularly installed software, as suggested by Davenport, since such a modification would allow the vendors and software developers to respond to actual customer usage and improve products to better facilitate usage of the software.

**Regarding claim 25**, the combination of Rignell, Lawrence, Pickover, Davenport disclose the mobile phone of claim 24, in addition Rignell discloses wherein the device agent comprises a user prompt to provide the device profile data to the customer care application and receive and execute solutions (paragraph [0076]; the mobile unit is provided with a menu item (i.e. user prompt) that the user selects to execute a test to determine if a support message should be sent and upon an affirmative response a support message request is generated).

**Regarding claim 26**, the combination of Rignell, Lawrence, Pickover, and Davenport disclose the mobile phone of claim 24, in addition Rignell discloses wherein the device agent

comprises a scheduler for timing scheduled provision of the device profile data to the customer care application and receiving and executing solutions (paragraphs [0024], [0027]-[0029] and [0074]-[0076]; a support request from the mobile unit may be generated at any internal event like a timer event or status check performed at regular intervals within the mobile unit).

9. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of LAWRENCE, PICKOVER et al., DAVENPORT, and SHENFIELD.

**Regarding claims 29**, the combination of Rignell, Lawrence, Pickover, Davenport disclose the device agent of claim 24, but the combination does not expressly disclose wherein the device profile data comprises XML data and the solution forwarded comprises XML data.

However, exchanging data using eXtensible Markup Language (XML) is well known in the art and Shenfield is evidence of the fact. Shenfield teaches that eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems and can be used on over-the-air applications (paragraphs [0004], [0006], and [0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of wherein the device profile data comprises XML data and the solution forwarded comprises XML data, as suggested by Shenfield, because eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems.

#### **(10) Response to Argument**

##### **Sub-Heading: Independent Claims 1 and 14**

**With respect to independent claims 1 and 14, the Appellant Argues:**

"As one example, independent claim 1 recites allowing hardware vendors and the software application developers to query the database and obtain statistics on a number of mobile devices with a particular installed software. The Examiner argues that these recitations are taught in paragraph [0014] of Davenport. Appellants respectfully disagree.

As discussed in paragraph [0014] of Davenport, an application executes on a computer to collect data about performance parameters, such as processor speed of the computer. The data is stored on the computer and then is transmitted (in the form of a session file) to a server for further processing (see Davenport at paragraph [0012]). The server processes the data and generates a summary which is transmitted to a data warehouse server for analysis and reporting in an on-line analytic processing (OLAP) environment (see Davenport at paragraph [0013]). Davenport further explains how the processed data is used: "in this way, a report 216 can be generated using the data as organized in the data warehouse server 214 and a report application, such as Microsoft Excel, to view the data in a desired format" (see Davenport at paragraph [0108]).

Thus, Davenport teaches that the data is provided in a report for viewing. This teaching is quite different than the elements in the claims. For example, claim 1 recites that the hardware vendors and the software application developers query the database. By contrast, the manufacturer in Davenport does not "query" the database, but is provided with a report for viewing. This claim recitation presents a significant difference over the teachings in Davenport.

By way of further example, claim 1 recites that the hardware vendors and the software application developers obtain "statistics on a number of mobile devices with a particular installed software." Nowhere does Davenport teach that the manufacturers obtain this type of information. Davenport teaches that the manufacturers obtain "information such as the processor speed of the computer system, the amount of its random access memory of the speed of the computer's Internet access" (see Davenport at paragraph [0011]). Davenport never suggests that the manufacturers obtain "statistics on a number of mobile devices with a particular installed software."

This claim recitation presents a significant difference over the teachings in Davenport. As explained in Appellants' specification, hardware and software vendors are able to determine a number of devices (such as phones) installed with the software and then allocate resources to curing this problem." (See pages 16-17 of Appellant arguments).

The Examiner respectfully disagrees. Davenport (US 2002/0198976) does not distinguish from the claim limitations, Davenport teaches in paragraph [0014] that his invention enables a software manufacturer (i.e., vendor and software application developer) to gain statistics about the usage of an application (i.e., particular software) across the application's entire user population (i.e., number of devices with a particular software) to improve products to better facilitate the actual usage. Furthermore, the abstract suggests that the software manufacturer obtains this particular information from a database system, for example, the abstract teaches that

a server environment (i.e., database system) summarize the statistical information about a software so that the software manufacturer can better know how its software product is used across a user population. Therefore, the database provides the statistics information to the software manufacturer and a person of ordinary skill in the art would recognize that a conventional way to obtain information from a database is via a query, thus the step of querying the database to obtain the statistical information is implicit in Davenport.

### **Hindsight Construction (Picking and Choosing)**

The Appellant argues:

"In order to reject independent claims 1 and 14, the Examiner combines five different references to allegedly obviate the claims. Appellants respectfully assert that the Examiner is using knowledge of Appellants' invention and then performing hindsight reconstruction to show the various claim elements. In other words, the Office Action is picking and choosing unrelated teachings from numerous isolated references. On this subject, the case law is clear: One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988)." (See page 18 of Appellant arguments).

In response to appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### **Sub-Heading: Dependent Claim 2**

With respect to claim 2, the Appellant argues:

"Dependent claim 2 recites allowing the hardware vendors and the software application developers to access the database and provide fixes for bugs in software for the mobile device. The Examiner argues that this claim element is taught in paragraphs [0026] - [0027] and [0047] in Pickover. Appellants respectfully disagree.

Paragraphs [0026] - [0027] in Pickover teach that software vendors provide patches directly to the user devices or to a controller that distributes the patches to user devices. Nowhere do these paragraphs teach or even suggest that the software vendors "access the database." A software vendor can have permission to transmit a patch to a database, but this permission would not give the software vendor access to the database. Access to a database requires special permission rights that are not taught or even suggested in Pickover." (See page 18 of Appellant arguments).

The Examiner respectfully disagrees. Pickover teaches, in paragraphs [0027] , [0055], and [0058], that patches (i.e., software fixes) may be stored in a database, therefore, the database is accessed to retrieve the necessary patch for a software error and further distribution.

In response to appellant's argument that the references fail to show certain features of appellant's invention, it is noted that the features upon which appellant relies (i.e., *access to a database requires special permission rights that not taught or even suggested in Pickover, see page 18, lines 19-22 of Appellant's arguments*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

#### **Sub-Heading: Dependent Claims 6 and 18**

**With respect to claims 6 and 18, the Appellant argues:**

"Dependent claim 6 recites allowing hardware vendors and the software application developers to query the database and search the device profile data while preserving privacy of a subscriber of the mobile device. The Examiner argues that this claim element is taught in Roberts at column 3, lines 39-45; and column 6, lines 37-60. Appellants respectfully disagree.

Roberts at column 3, lines 39-45 teach that a vendor can target advertisements to users while protecting privacy information regarding the user and/or the user's device against unauthorized access. In Roberts, the vendors are advertisers, not hardware vendors and software vendors. **Furthermore, the vendors in Robert are not querying a database and searching for device profiles. Instead, the vendors are sending out advertisements to users.**

Roberts at column 6, lines 37-60 teaches that a marketing module scans computers of users to determine profiles used to market to the users. This profile information includes hardware information of the user's computer. Nowhere does this section of Roberts teach or even suggest that hardware vendors and software vendors query a database. The vendors in Roberts are advertisers marketing to users. **Furthermore, the vendors in Robert are not querying a database and searching for device profiles. Instead, a marketing program is searching user computers, not a database of device profiles of these users.**" (See page 19 of Appellant arguments).

The Examiner respectfully disagrees. Roberts (US 6,895,387) in col. 6, lines 60-63 reads: "Any application or programs that desire access to the end user profile, such as the dynamic advertisement application as described below, would thus be required to contain an authentication key for description". This passage suggests that the information is accessed from an inherent database in where an end user profile is stored. Furthermore, Roberts teaches that private information about a user is protected against unauthorized access (col. 3, lines 39-45).

Also, while Roberts teaches protecting private information of a user in a marketing service, in various applications it is standard to protect private information of a user against unauthorized access.

#### **Sub-Heading: Dependent Claims 7 and 17**

The Appellant argues:

"Dependent claim 7 recites allowing hardware vendors and the software application developers to access the database and obtain reports on stability of an application in the mobile device. The Examiner argues that this claim element is taught in paragraphs [0020] and [0021] in Bartley. Appellants respectfully disagree.

Paragraphs [0020] and [0021] in Bartley teach a method and system that allows access to performance data of a computer system of a customer only if the customer enables transmission of the performance data to the vendor. Figure 1 in Bartley shows the computer system, which is not a mobile device as recited in claim 7. Furthermore, in Bartley, the vendors receive a transmission of the performance data (see paragraph [0023] in Bartley). The vendors are not accessing a database.

Receiving data from a remote system is very different than accessing a database to obtain the information. Nowhere does Bartley teach or even suggest that the vendors access the database to obtain the performance data." (See page 20 of Appellant arguments).

The Examiner respectfully disagrees. Bartley teaches that is standard for vendors to access performance data (i.e., stability information) of applications to provide customers with other products and services (see paragraphs [0020]-[0021]).

**Sub-Heading: Independent Claim 24**

**With respect to claim 24**, the Appellant argues that:

"As one example, independent claim 24 recites a mobile phone including device profile data that is accessible by software application developers and hardware vendors to provide fixes for bugs in software in the mobile device. The Examiner argues that these recitations are taught in Pickover. Appellants respectfully disagree.

Pickover teaches that software vendors provide patches directly to the user devices or to a controller that distributes the patches to user devices. Nowhere do these paragraphs teach or even suggest that the software vendors have access to profile data in a mobile phone. Instead, the information is transmitted to the vendors in Pickover. The vendors are not accessing profile data in a mobile phone to obtain the data." (See pages 21-22 of Appellant's arguments).

The Examiner respectfully disagrees. Pickover, in paragraphs [0005]-[0006], [0026]-[0027]), teaches that application developers and vendors (i.e., software providers) have access to profile data of mobile devices (i.e., error data on a user device) and are able to forward a patch for the error identified.

Furthermore, the Appellant argues:



"As one example, independent claim 24 recites allowing hardware vendors and the software application developers to query the database and obtain statistics on a number of mobile devices with a particular installed software. The Examiner argues that these recitations are taught in paragraph [0014] of Davenport. Appellants respectfully disagree.

As discussed in paragraph [0014] of Davenport, an application executes on a computer to collect data about performance parameters, such as processor speed of the computer. The data is stored on the computer and then is transmitted (in the form of a session file) to a server for further processing (see Davenport at paragraph [0012]). The server processes the data and generates a summary which is transmitted to a data warehouse server for analysis and reporting in an on-line analytic processing (OLAP) environment (see Davenport at paragraph [0013]). Davenport further explains how the processed data is used: "in this way, a report 216 can be generated using the data as organized in the data warehouse server 214 and a report application, such as Microsoft Excel, to view the data in a desired format" (see Davenport at paragraph [0108]).

Thus, Davenport teaches that the data is provided in a report for viewing. This teaching is quite different than the elements in the claims. For example, claim 1 recites that the hardware vendors and the software application developers query the database. By contrast, the manufacturer in Davenport does not "query" the database, but is provided with a report for viewing. This claim recitation presents a significant difference over the teachings in Davenport.

By way of further example, claim 1 recites that the hardware vendors and the software application developers obtain "statistics on a number of mobile devices with a particular installed software." Nowhere does Davenport teach that the manufacturers obtain this type of information. Davenport teaches that the manufacturers obtain "information such as the processor speed of the computer system, the amount of its random access memory of the speed of the computer's Internet access" (see Davenport at paragraph [0011]). Davenport never suggests that the manufacturers obtain "statistics on a number of mobile devices with a particular installed software."

This claim recitation presents a significant difference over the teachings in Davenport. As explained in Appellants' specification, hardware and software vendors are able to determine a number of devices (such as phones) installed with the software and then allocate resources to curing this problem." (See pages 22-23 of Appellant arguments).

The Examiner respectfully disagrees. Davenport (US 2002/0198976) does not distinguish from the claim limitations, Davenport teaches in paragraph [0014] that his invention enables a software manufacturer (i.e., vendor and software application developer) to gain statistics about the usage of an application (i.e., particular software) across the application's entire user population (i.e., number of devices with a particular software) to improve products to better facilitate the actual usage. Furthermore, the abstract suggests that the software manufacturer

obtains this particular information from a database system, for example, the abstract teaches that a server environment (i.e., database system) summarize the statistical information about a software so that the software manufacturer can better know how its software product is used across a user population. Therefore, the database provides the statistics information to the software manufacturer and a person of ordinary skill in the art would recognize that a conventional way to obtain information from a database is via a query, thus the step of querying the database to obtain the statistical information is implicit in Davenport.

**Claims 9, 21, 23-29**

**With respect to claims 9, 21, 23-29**, the Appellant argues that the claims are patentable because of their dependency of independent claims 1, 14, and 24 and the reasons with respect to claims 1, 14, and 24. However, these arguments have been addressed above, see Examiner's response for claims 1, 14, and 24.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Marisol Figueroa/

Examiner, Art Unit 2617

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